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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTIAN LITA

Appeal 2009-013365
Application 09/282,692
Technology Center 2400

Before MARC S. HOFF, DENISE M. POTHIER, and STANLEY M.
WEINBERG, *Administrative Patent Judges*.

POTHIER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-22. We have jurisdiction under 35 U.S.C. § 6(b). We affirm-in-part.

Invention

Appellant's invention relates to a method and system for balancing requests to a set of servers. *See* Spec. 1:4-8. Claim 1 is reproduced below:

1. A method for managing connection requests to a pool of servers identified by a given URL, comprising the steps of:
 - in response to a connection request from a given client machine that initiates a session, associating a session identifier with a given server in the pool;
 - using the session identifier in a redirection response;
 - returning the redirection response to the given client to redirect the connection request to the given server; and
 - during the session, receiving at the given server any additional connection requests from the given client machine.

The Examiner relies on the following as evidence of unpatentability:

Cherkasova	US 6,360,270 B1	Mar. 19, 2002 (filed Nov. 16, 1998)
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THE REJECTION

Claims 1-22 are rejected under 35 U.S.C. § 102(e) as anticipated by Cherkasova. Ans. 3-13.¹

¹ Throughout this opinion, we refer to (1) the Appeal Brief filed December 13, 2004; (2) the Examiner's Answer mailed April 14, 2009; and (3) the Reply Brief filed July 14, 2009.

THE CONTENTIONS

Regarding independent claim 1, the Examiner finds that (1) Cherkasova's transaction identifier is the session identifier (Ans. 4, 13); (2) Cherkasova's cookie having the transaction identifier is the redirection response (Ans. 4, 13-15); and (3) returning a cookie or a HTTP form having the transaction identifier to the client discloses the step of returning the redirection response to the given client to redirect the connection request to the given server (*see* Ans. 4, 13-14).

Appellant argues, among other things, that Cherkasova's cookie is not a redirection response and does not teach including a session identifier into a redirection response (App. Br. 15, 17) and that the Examiner has disregarded "the 'redirection' characteristic of the response message" (App. Br. 17).

ISSUES

Under § 102, has the Examiner erred in rejecting claim 1 by finding that Cherkasova discloses:

- (1) associating a session identifier with a given server in a pool;
- (2) using the session identifier in a redirection response; and
- (3) returning the redirection response to the given client to redirect the connection request to the given server?

ANALYSIS

Based on the record before us, we find error in the Examiner's rejection of claim 1. Cherkasova discloses a process that includes an admission controller 14 that receives arriving messages 20 targeted for a server 12 and accepts messages for receipt by the server if the arriving

messages correspond to sessions underway or if there are sufficient resources in the server 12 to process a new session. Col. 4, ll. 15-42; Fig. 1. Cherkasova further discusses a deferral manager 18 that handles unaccepted messages 24 and transfers the messages to another server, in one embodiment, that replicates the server 12's functionality. Col. 4, ll. 50-58; col. 5, 58-62; Figs. 1-2. Thus, contrary to Appellant's statement (App. Br. 13), Cherkasova's Figure 1 embodiment discloses a pool of servers and is relevant to the present invention.

When sufficient resources are available (YES at step 36), Cherkasova discloses creating a new entry in the transaction list at step 40 and then the request is passed to the server 12. Col. 5, l. 62 – col. 6, l. 8; Fig. 2. In one embodiment, this step also involves writing a new transaction identifier as a new entry in the transaction list 26 that may be returned to the requesting client as a cookie or a HTTP form. Col. 6, ll. 2-8. Also, at least in one embodiment, the web server (e.g., 50) itself generates the transaction identifier (*see* col. 9, ll. 65-66). Moreover, Appellant admits that there is an embodiment that has the admission controller embedded in or associated with a single server. *See* App. Br. 13 (stating “[t]he first embodiment is an admission controller embedded in a single server”) Thus, in both these scenarios, the transaction identifier relates to or is associated with a given server in the server pool as broadly recited.

Cherkasova's cookie containing the transaction identifier is also returned to the client. Col. 6, ll. 4-8. However, Appellant contends that this cookie is not a redirection response. App. Br. 15. Even assuming for purpose of this discussion that Cherkasova's cookie returned to the client is a redirection response, Cherkasova does not discuss that this response also

redirects the connection request to the recited given server (i.e., server 12) with which the session identifier is associated. That is, the cookie is returned to the client, but Cherkasova does not further discuss the returned cookie being used to redirect the connection request to the given server. Rather, the new request message (i.e., the connection request) is passed to the server 12 at step 42 and is not redirected in any manner. Col. 5, ll. 62-65. Similarly, in the Figure 3 embodiment, a cookie returned to the client does not redirect the connection request to the given server but, rather, is used to include the transaction identifier in *subsequent* request messages. *See* col. 9, l. 44 – col. 10, l. 17; Fig. 3.

Lastly, Cherkasova discloses redirecting a message to another server. Col. 4, ll. 55-58; col. 9, ll. 55-57. But Cherkasova does not teach using the transaction identifier in this redirected message as claim 1 requires or redirecting the response to the client to redirect the connection request to given server (e.g., server 12 or 50). *See id.* We therefore agree with Appellant that Cherkasova does not necessarily disclose collectively above steps (1)-(3) listed in the issue statement.

For the foregoing reasons, Appellant has persuaded us of error in the rejection of: (1) independent claim 1 and (2) dependent claims 2-8 for similar reasons.

Claims 9, 13-15, 18, and 21

Representative independent claim 9 differs in scope from claim 1. For example, claim 9 does not require using the session identifier in the redirection response and only recites returning a redirection response to the client machine for the connection request. Using similar passages to claim

1, the Examiner maps Cherkasova's: (1) admission controller monitoring the load on a server to the step of associating a user session originating from a client machine with a given server in the pool using a load balancing protocol and (2) cookie returned to the client to the recited redirection response to the client machine. Ans. 6, 13-16.

Appellant refers to the arguments related to the second and third element of claim 1 when addressing claim 9. *See* App. Br. 21. Appellant additionally contends that Cherkasova does not disclose load balancing over a set of servers. App. Br. 21-22.

ISSUES

Under § 102, has the Examiner erred in rejecting claim 9 by finding that Cherkasova discloses:

- (1) associating a user session originating from a client machine with a given server in the pool using a load balancing protocol and
- (2) returning a redirection response to the client machine for the connection request?

ANALYSIS

Based on the record before us, we find no error in the Examiner's rejection of claim 9. As discussed above in connection with claim 1, Cherkasova discloses a pool of servers and associating a user session originating from a client machine with a given server of a server pool. For example, Cherkasova discloses associating a user session originating from a client machine with a given server (e.g., server 12 or 50) when writing a new transaction identifier into the new entry of the transaction list 26 at step 40.

Col. 6, ll. 2-4. Yet, Appellant further argues that this association to a server is not according to a load balancing protocol. App. Br. 21-22. We disagree.

Appellant does not define a particular or special type of “load balancing protocol.” *See generally* Specification. We thus will give this phrase its broadest reasonable construction in light of the disclosure to include any manner of balancing the work load among servers. *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). As the Examiner explains (*see* Ans. 6, 16), Cherkasova discloses that the admission controller balances jobs or loads between servers by determining if a server has sufficient resources and can adequately handle additional sessions. Specifically, Cherkasova discloses an admission controller that accounts for a number of metrics, including whether sufficient resources are available in a server for new session, in deciding whether to forward a message to server 12 or redirect the message to another server. Col. 4, ll. 1-35, 50-58; col. 5, ll. 44-57; col. 10, ll. 31-38; Figs. 1-2.

The Examiner also cites to Cherkasova’s discussion (Ans. 6) of a deferral manager 18 deferring messages 30 to another server to reserve a future time interval for access to server 12. Col. 5, ll. 1-8. These steps of determining whether one server has sufficient resources and, if not, redirecting messages to another server, at least temporarily, all involve load balancing the servers and associating a connecting request from a client with a given server in the pool using a load balancing protocol as recited in claim 9. Additionally, the mere attempt to send the message to the server 12, even if later redirected, is also a temporary association of the user session from the client machine with the given server 12.

Appellant further asserts that Cherkasova's cookie is not a "redirection response" (App. Br. 15-17) and that the Examiner has disregarded the "common definitions of the technical term of a 'redirection response'" (App. Br. 17; *see also* Reply Br. 2-3). Appellant contends that "a redirection message is a message that has been blocked from further processing by the admission controller and is being redirected to another server by a deferral manager" (App. Br. 15) and differs from a typical response message (App. Br. 17). However, Appellant provides no supporting evidence of this purported common understanding of the term "redirection response," and mere arguments unsupported by factual evidence are entitled to little probative value. *Cf., In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997). Appellant describes one redirection response (Spec. 13: 24-14:5), but this is only an example of such a response. We thus give the term, "redirection response," its broadest reasonable construction to include a response directed away from one device and to another device.

Notably, unlike claim 1, claim 9 also does not recite returning a redirection request to the client to redirect the connection request to the given server. Rather, claim 9 recites returning a redirection response to the client machine *for* the connection request. As discussed above when addressing claim 1 and as discussed by the Examiner (*see* Ans. 14-15), Cherkasova's cookie is returned to the client machine after the message is sent to a server for processing. Thus, the cookie relates to or is for the connection request. Also, this cookie or response is directed away from the server and to the client. We therefore find that Cherkasova discloses a redirection response, as broadly as recited, for the connection request.

For the foregoing reasons, Appellant has not persuaded us of error in the rejection of independent claim 9 and claims 13-15, 18 and 21 not separately argued with particularity (App. Br. 21-22).

Claims 10-12, 16, 17, 19, and 20

Regarding claim 10, the Examiner finds that Cherkasova maps generating a HTTP form with a hidden field or a cookie to the step of generating a virtual Uniform Resource Locator (URL). *See* Ans. 7, 15-16. Appellant asserts that Cherkasova does not disclose generating a virtual URL as recited. App. Br. 23-24; Reply Br. 3-4.

ISSUE

Under § 102, has the Examiner erred in rejecting claim 10 by finding that Cherkasova discloses generating a virtual URL by modifying a given URL to include a session identifier?

ANALYSIS

Based on the record before us, we find error in the Examiner's rejection of claim 10. Claim 10 recites generating a virtual URL by modifying a given URL to include a session identifier and using the virtual URL to redirect the connection request to the given server. When addressing the "generating a virtual URL" limitation, the Examiner relies on Cherkasova's discussion of generating the cookie. *See* Ans. 15-16. However, the Examiner has not sufficiently demonstrated how this cookie modifies anything, including a given URL, in generating the virtual URL as the claim requires. Alternatively, the Examiner also maps the HTTP form

with a hidden field returned to the client as the generating a virtual URL step. *See* Ans. 6, 15-16. Yet, generating the HTTP form also suffers from the same problem discussed above – namely that the Examiner has not sufficiently demonstrated how this HTTP form modifies a given URL in generating the virtual URL as claim 10 requires.

Claims 16 and 19 include similar limitations to claim 10. We therefore find that Cherkasova suffers from the same problems as described above when addressing claim 10 and equally does not anticipate these claims.

Appellant thus has persuaded us of error in the rejection of (1) claim 10; (2) claims 16 and 19, which are commensurate in scope with claim 10, and (3) dependent claims 11, 12, 17, and 20 for similar reasons.

Claim 22

Independent claim 22 includes a similar limitation to claim 1. Namely, claim 22 recites sending the redirection response to the given client machine to redirect the connection request to the given server. For the reasons set forth above in connection with claim 1, we agree with Appellant that Cherkasova fails to disclose this limitation. Also, claim 22 recites generating a virtual URL by modifying a given URL from the connection request. For the reasons set forth above in connection with claim 10, we also agree with Appellant that Cherkasova fails to disclose this limitation and that the Examiner therefore erred in rejecting claim 22.

CONCLUSION

Under § 102, the Examiner did not err in rejecting claims 9, 13-15, 18, and 21 but erred in rejected claims 1-8, 10-12, 16, 17, 19, 20, and 22.

DECISION

The Examiner's decision rejecting claims 1-22 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

gvw